

**ABSTRACT**

The invention relates generally to genes that encode proteins that inhibit axonal growth. The invention relates specifically to genes encoding NgR protein homologs in humans and mice. The invention also includes compositions and methods for  
5 modulating the expression and activity of Nogo and the NgR proteins. Specifically, the invention includes peptides, proteins and antibodies that block Nogo-mediated inhibition of axonal extension. The compositions and methods of the invention are useful in the treatment of cranial or cerebral trauma, spinal cord injury, stroke or a demyelinating disease.

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